JOURNAL

OF THE

Royal United Service Institution,

WHITEHALL YARD.

PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL.

Authors alone are responsible for the contents of their respective Papers.

VOL. XXXVIII.

LONDON:
PUBLISHED BY HARRISON AND SONS,
59, PALL MALL,
Booksellers to the Queen and H.R.H. the Prince of Wales.

1894.

[*Entered at Stationers' Hall. All rights reserved.*

LONDON:
HARRISON AND SONS, PRINTERS IN ORDINARY TO HER MAJESTY, ST. MARTIN'S LANE.

CONTENTS OF VOLUME THE THIRTY-EIGHTH.

	PAGE
The Action of Cavalry and Horse Artillery illustrated by Modern Battles. By Major E. S. May, R.A.	1
The Rise, Decay, and Revival of the Prussian Cavalry. By Captain F. N. Maude, late R.E.	20
The Effect of the Lee-Metford Bullet on the Bones of Horses. By Veterinary-Captain F. Smith, A.V.D.	41
The Three Days' Naval Action in the Dardanelles, on the 17th, 18th, and 19th July, 1657. Translated from the "Marine Rundschau" by Commander H. Garbett, R.N.	51
The Dashiell Gun	68
Manœuvres: their Planning and Execution. By Colonel Wille, Chef d'Arme of the Swiss Cavalry. Translated by Lieut.-General W. H. Goodenough, C.B., R.A.	71
Naval and Military Notes	81
Contents of Foreign Journals, &c., for December, and Notices of Books	95
Names of Members who joined the Institution between the 1st October and the 31st December, 1893	101
The Telephotos: a New Means of Electrical Signalling by Night and Day, for the Naval, Military, Merchant Marine, Lighthouse, and Life-saving Services. With Practical Demonstrations of its Application. By Colonel G. E. Gouraud, late United States Army	103
Transport, Supply, and Equipment of the British Section of the Commission for the Delimitation of the British and Portuguese Spheres of Influence in East Africa, 1892. By Major J. J. Leverson, R.E.	115
Origin and History of the Admiralty Badges. By Rear-Admiral R. M. Blomfield	133
A Précis of the History of the 1st Regiment of Massachusetts Cavalry Volunteers during the American Civil War. Compiled by Captain R. A. Henderson, the Manchester Regiment	143
The Krnka-Hebler Bullet. By Captain F. L. Nathan, R.A.	172
Magazine Rifle Trials in the United States. Compiled by Captain F. L. Nathan, R.A.	175
The Russian Navy. (Translated, by permission, from "La Vie Contemporaine" by Commander H. Garbett, R.N.)	179
Notes on the English Naval Manœuvres of 1893. (Translated from the "Rivista Marittima" of January, 1894, by T. J. Haddy, R.N.)	187
Naval and Military Notes	193
Contents of Foreign Journals for January, and Notices of Books	206

	PAGE
List of the Army Regulations and Instructions in force on the 1st January, 1894	217
The Ram, in Action and in Accident. By W. Laird Clowes, United States Naval Institute, Fellow of King's College	223
The Soldier's Sore Foot. By Surgeon-Captain W. C. Beevor, Scots Guards	243
The Loss of Horses in War. By Veterinary-Captain F. Smith, F.R.C.V.S., F.I.C., Army Veterinary Department	267
The Wars of Frederic the Great. By the German General Staff. (Précis of the Introductory Chapters.) By Captain F. N. Maude, late R.E.	313
Electric Light Projectors for Coast Defence. (Translated from the "Rivista Marittima" for January, 1894, by T. J. Haddy, R.N.)	326
Naval and Military Notes	335
Contents of Foreign Journals for February, and Notices of Books	349
The Tactics best adapted for developing the Power of existing Ships and Weapons (Gun, Ram, and Torpedo) which should regulate Fleets, Groups, and Single Vessels in Action. By Commander F. C. D. Sturdee, R.N.	365
Manœuvres in Ireland, 1893	419
Armour-Plate Trials at Pola, Austria	445
The Invasion of France (reprint from *Times*)	449
Naval and Military Notes	453
Contents of Foreign Journals for February, and Notices of Books	466
Names of Members who joined the Institution between the 1st January and the 31st March, 1894	479
The Tactics best adapted for developing the Power of existing Ships and Weapons (Gun, Ram, and Torpedo) which should regulate Fleets, Groups, and Single Vessels in Action. By Lieutenant S. A. G. Calthorpe, R.N., H.M.S. "Vernon"	481
The National War on the River Loire in 1870. A review of Captain Hoenig's work, by Major W. Western, R. West Kent Regiment	511
Naval and Military Notes	557
Contents of Foreign Journals for April, and Notices of Books	572
Some Aspects of Coast Defence. By Lieutenant-Colonel J. R. J. Jocelyn, R.A.	587
Machine Guns with Cavalry. By Captain W. Anstruther-Thomson, Royal Horse Guards	617
"The Art of Breathing as applied to Physical Development." By A. L. Hoper Dixon, Surgeon-Captain, A.M.S.	641
Naval and Military Notes	657
Contents of Foreign Journals for May, and Notices of Books	627
Military Topography. By Major Willoughby Verner, Rifle Brigade	687
The Firing Line and how to keep it Organically Subdivided to the Last. By Lieutenant-Colonel H. A. Sawyer, Commandant 45th (Rattray's) Sikhs	711
The Moral Element in Strategical Science of the Nineteenth Century. By R. G. Burton, Lieutenant, 1st Infantry, Hyderabad Contingent	739
The Rock Fortresses of Velez de la Gomera and Alhucemas. By Lieutenant Colonel J. C. Dalton, R.A.	747

PAGE

A Study of War Navies. By General PESTITCH, of the Russian Imperial Marine 753

Torpedo-boats in Fleet Actions. By Lieutenant M. CIPRIANI, of the Italian Navy 762

Naval and Military Notes 769

Contents of Foreign Journals for June, and Notices of Books 788

Attack or Defence Strategically and Tactically Considered. By Captain F. N. MAUDE, late R.E. 805

Steam Transport on Roads. By Lieutenant-Colonel J. L. B. TEMPLER, 7th Batt., K.R.R.C. 829

The Italian Operations at Agordat, in the Eastern Sudan: Notes and Documents by General E. Arimondi. Translated by Commander A. PAGET, R.N. 845

Naval and Military Notes 867

Contents of Foreign Journals for July, and Notices of Books 890

The Training of Volunteer Officers. By Colonel T. STURMY CAVE 899

National Methods of Obtaining a Supply of Seamen. By W. C. CRUTCHLEY, Lieut., R.N.R. 921

Le Soudan Français, and Recent French Operations on the Upper Niger. By Captain S. PASFIELD OLIVER, late Royal Artillery 943

School Swordplay. By Captain A. HUTTON, late K.D.G's. 975

Researches on Modern Explosives. By WILLIAM MACNAB, F.I.C., F.C.S., and E. RISTORI, Assoc. M. Inst. C.E., F.R.A.S. 979

Naval and Military Notes 991

Contents of Foreign Journals for August, and Notices of Books 1011

Some Methods of Executing Infantry Fire on the Battlefield. By Captain C. B. MAYNE, R.E. 1025

Signalling: Present Defects and Suggested Improvements. By Lieutenant-Colonel A. STEWART HARRISON 1043

Recent Progress in Marine Machinery. By NABOR SOLIANI. (Translated from the "Rivista Marittima" by Staff Engineer T. J. HADDY, R.N.).. 1069

v. Löbell's Annual Reports on the Changes and Progress in Military Matters during 1893. Compiled by Colonel H. T. HILDYARD, Commandant, Staff College 1081

Naval and Military Notes 1141

Contents of Foreign Journals for September, and Notices of Books 1170

Lessons from the Past for the Present. By Lieut.-Colonel G. F. R. HENDERSON, Professor of Military Art, Staff College 1183

The Differentiation of Naval Force: a Comparison. By H. L. SWINBURNE, Esq. 1207

Discussion on Naval Prize Essay 1237

The Campaigns of Saxe. By Lieut.-Colonel E. M. LLOYD, late R.E. 1247

Naval and Military Notes 1287

Contents of Foreign Journals for October, and Notices of Books 1314

The Training of Volunteer Infantry. By Lieut.-Colonel C. G. A. MAYHEW 1335

A New Method of Manœuvring "Controllable" Torpedoes or other Vessels when absolutely Invisible to the Operator. By Lieutenant C. W. SLEEMAN, late R.N. 1367

PAGE

The Admiralty Flag. By Rear-Admiral R. M. Blomfield..... 1385

A Volunteer Brigade Camp. By Major E. Satterthwaite, 2nd Vol. Batt. R. W. Kent Regt..... 1411

Naval Notes. Bow and Broadside Armament of Latest Types of French and English Battle-ships and Cruisers (Comparative Table) 1429

Military Notes. The American Cavalry. Side-lights on the German Staff, &c..... 1446

Contents of Foreign Journals for November, and Notices of Books..... 1456